

IN THE CLAIMS

Please amend the claims as follows.

1. (currently amended) A portable x-ray device, comprising:
a housing with a first portion that contains an x-ray source; and that is powered by an integrated power system and the housing also contains an internal power source;
wherein the x-ray device has a high current load sufficient for radiographic imaging.
2. (currently amended) The device of claim 1, wherein the integrated power system comprises a plurality of low voltage power supplies.
3. (original) The device of claim 1, wherein each power supply provides a power ranging from about 20 to about 50 kV.
4. (original) The device of claim 2, wherein the power system provides a continuous high voltage DC power.
5. (currently amended) The device of claim 1, further ~~comprises an integrated display~~
~~means~~ comprising a display for a radiographic image that is integrated into the housing.
6. (original) The device of claim 1, wherein the x-ray source is shielded with a low-density insulating material.

7. (original) The device of claim 6, wherein the low-density insulating material comprises silicone or epoxy.

8. (original) The device in claim 6, wherein the shielding further comprises a high-Z substance.

9. (currently amended) The device in claim 8, wherein the high-Z substance comprises ~~is~~ ~~compounds of~~ Pb, W, Ta, Bi, Ba, or combinations thereof.

10. (currently amended) A handheld x-ray device, comprising:
a housing with a first portion that contains an x-ray source shielded with a low-density insulating material; and that is powered by an integrated power system; and
the housing also has a second portion that contains an internal power source, the second portion being removably attached to the first portion so that when the second portion is removed from the first portion, no power is generated for the x-ray source;
wherein the x-ray device has a high current load for radiographic imaging.

11. (original) The device of claim 10, wherein the power system comprises a plurality of low voltage power supplies with each power supply providing a power ranging from about 20 to about 50 kV.

12. (original) The device of claim 10, wherein the low-density insulating material comprises silicone or epoxy.

13. (currently amended) The device in claim 12, wherein the shielding further comprises a high-Z substance ~~like compounds of Pb~~; comprising W, Ta, Bi, Ba, or combinations thereof.

14. (currently amended) A system for x-ray analysis, the system containing a portable x-ray device with a housing containing an x-ray source that is powered by an integrated power system which includes a plurality of power supplies with each power supply providing a power ranging from about 20kV to about 50kV and the integrated power system provides with a high current load sufficient for radiographic imaging, and containing an x-ray source and an integrated power system wherein the housing also contains an internal power source.

15. (currently amended) The system of claim 14, ~~wherein the power system comprises a plurality of low voltage power supplies with each power supply providing a power ranging from about 20 to about 50 kV~~ wherein x-ray ray source is contained in a first portion of the housing and the internal power source is contained in a second portion that is removably attached to the first portion so that when the second portion is removed from the first portion, no power is generated for the x-ray source.

16. (original) The system of claim 14, wherein x-ray source is shielded with a low-density insulating material containing a high-Z substance.

17. (currently amended) A method for making a portable x-ray device with a high current load, the method comprising:

providing an x-ray source in a first portion of a housing; and
providing an integrated power system in the first portion of the housing and connecting it to the x-ray source;

providing an internal power source in a removable, second portion of the housing; and
connecting the second portion to the first portion.

18. (original) The method of claim 17, including:

providing the power system with a plurality of low voltage power supplies with each power supply providing a power ranging from about 20 to about 50 kV; and

providing the x-ray source with a shielding comprising a low-density insulating material containing a high-Z substance.

19. (currently amended) A method for analysis, comprising:

providing a material to be analyzed;

providing a portable x-ray device with a high current load, the device having a housing that contains and containing an x-ray source and that is powered by an integrated power system and the housing also contains an internal power source; and

actuating the x-ray source so that an x-ray impinges on the material ~~using the integrated power system.~~

20. (original) The method of claim 19, including:

providing the power system with a plurality of low voltage power supplies with each power supply providing a power ranging from about 20 to about 50 kV; and

providing the x-ray source with a shielding comprising a low-density insulating material containing a high-Z substance.

21. (currently amended) A method for dental imaging, comprising:

providing a tooth of a patient to be analyzed;

providing a portable x-ray device with a high current load for radiographic imaging, the device having a housing that contains ~~containing~~ an x-ray source ~~and that is powered by an~~ integrated power system and the housing also contains an internal power source; and

actuating the x-ray source ~~using the integrated power system~~ so that x-rays impinge ~~in on~~ that tooth ~~the teeth of a patient.~~

22. (original) The method of claim 21, including:

providing the power system with a plurality of low voltage power supplies with each power supply providing a power ranging from about 20 to about 50 kV; and

providing the x-ray source with a shielding comprising a low-density insulating material containing a high-Z substance.

23. (currently amended) A portable x-ray device ~~camera~~, comprising:

~~an x-ray source;~~ and

~~an integrated power system;~~

~~wherein the x-ray device has a high current load for radiographic imaging a housing~~ having a first portion that contains an x-ray source that is powered by an integrated power system which includes a plurality of power supplies with each power supply providing a power ranging

from about 20kV to about 50kV and the power system provides a current sufficient for radiographic imaging;

the housing also having a second portion that contains an internal power source and the second portion is removably attached to the first portion so that when the second portion is removed from the first portion, no power is generated for the x-ray source; and

a display integrated into the first portion of the housing to display a radiographic image.

24. (currently amended) The device of claim 23, wherein ~~the power system contains a plurality of low voltage power supplies with each power supply providing a power ranging from about 20 to about 50 kV, and the x-ray source contains a shielding comprising a low-density insulating material containing a high-Z substance.~~